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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/713,965

11/15/2000

David R. Scott

277-P-32-USA

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EXAMINER

PORTER, RACHEL L

ART UNIT

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3626

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/713,965	Applicant(s) SCOTT, DAVID R.	
	Examiner RACHEL L. PORTER	Art Unit 3626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Notice to Applicant

1. This communication is in response to the amendment filed on 8/13/08. Claims 8-12 are pending.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/13/08 has been entered.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 8-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 8 and 12 have been amended to recited that the satellite has been launched into unintended orbit "but otherwise remains funtional." The language further recites the ability of the satellite to remain in unintended orbit, but "functional" triggers

the rescue mission provision. It is unclear to the examiner how the satellite(s) can be in an unintended orbit (i.e. useless or not functioning for its intended purpose) but still functional. In other words, the manner in which the satellite is functioning/ functional is unclear.

Claims 8 and 12 further recite "launching the satellite into an unintended orbit..." The examiner understands a claimed method to be the performance of a series of deliberate steps. Therefore, it is unclear to the Examiner how the satellite is launched into "an unintended orbit."

Claims 9-11 inherit the deficiencies of claim 8 through dependency and are therefore also rejected.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 8-12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter

Based on Supreme Court precedent and recent Federal Circuit decisions, the Office's guidance to examiners is that a §101 process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v.*

Benson, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780,787-88 (1876). If neither of these requirements is met by the claim, the method is not a patent eligible process under §101 and should be rejected as being directed to nonstatutory subject matter.

Further guidance regarding these requirements regarding process claims provides that steps of the process should include transformation or be tied to a specific machine or apparatus for any of its process steps. (See *In re Bilski*, 88 USPQ2d 1385, 1391)

As per exemplary claims 8 and 12, the claim language does not include the required tie to a specific machine or apparatus to perform the steps of the process or transformation that would provide the application of the test to the claim to reach the conclusion of nonstatutory subject matter.

Claims 9-11 contain similar deficiencies and fail to correct the deficiencies of claim 8, and are therefore also rejected.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 8, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Otis (L.H. Otis, "Insured Satellite 'Reboost' is a First," National Underwriter, vol. 95, issue 16, April 1991, pp. 7-9) in view of Shapiro (Stacy Shapiro; "Abundance of Capacity Reducing Satellite Rates," Business Insurance, 5/5/97, vol. 31, no. 18, p. 32) and in further view of Wallstreet ("Insurance Firms Hire NASA to Find Two Lost Satellites", The WallStreet Journal, October 23, 1984—hereinafter Wallstreet)

(A) As per claim 8, Otis discloses a method of insuring through coverage for the in-space recovery and "reboost" of a satellite (par. 2) comprising:

- purchasing a satellite for orbiting the earth/ acquiring a satellite for orbiting the earth by INTELSTAT (see discussion of INTELSTAT VI (F-3) for providing worldwide telecommunications services) (par. 3-4) (It is respectfully submitted that Hughes Aircraft built the INTELSTAT VI which INTELSTAT then acquired which is considered to be a form of purchasing);
- obtaining a risk management package encompassing two separate but overlapping coverages in one policy, wherein the first portion of the coverage insures the satellite in low orbit and until its recovery by the NASA space shuttle, and wherein the second phase of coverage encompasses the operation of placing the satellite into the cargo hold of the space shuttle, refitting it with a new perigee motor, and the reboost of it into its final operational orbit (par. 7-8) (It is respectfully submitted that this provision of the Otis article would cover the launch of the satellite into an unintended orbit (i.e., if the rescue mission of the INTELSTAT VI fails because the satellite is re-launched into an unintended orbit,

then the policy would cover this failure since any failure is part of the package (par. 12)); and

- launching the satellite into an unintended orbit but the satellite otherwise remains functional so as to trigger the rescue mission provision; (par. 2-8—See 112, 2nd paragraph rejection); and
- initiating a rescue/ recovery mission and moving the satellite from an unintended operational (lower) orbit to a final operational orbit (par. 2-8).

Otis fails to expressly disclose: obtaining a launch insurance policy prior to launching the satellite from Earth.

Shapiro discloses obtaining satellite launch insurance coverage, which covers the satellite from its initial Earth launch through some term into its orbit. (Shapiro: par. 15-16, 30, i.e. wherein the launch insurance policy including a provision from a guarantor covering the launch of the satellite into an unintended orbit.) At the time of the Applicant's invention, it would have been obvious to one of ordinary skill in the art to modify the method of Otis with teachings of Shapiro to include satellite launch insurance to cover a satellite insurance prior to initial launch from Earth. As suggested by Shapiro, one would have been motivated to include this feature to reduce the risk from loss of revenue and customer confidence resulting from any aspect of satellite failure/malfunction. (par. 33)

Otis discloses a method a brokerage group, Corron and Black Inspace, provides a risk management package encompassing two separate but overlapping coverages,

(par. 5-7), in exchange for a premium (par. 15-16). In the policy, the first portion of the coverage insures the satellite in low orbit and until its recovery by the NASA space shuttle, and wherein the second phase of coverage encompasses the operation of placing the satellite into the cargo hold of the space shuttle, refitting it with a new perigee motor, and the reboost of it into its final operational orbit (par. 5-7). (Hughes payse

Otis does not expressly disclose paying a rescue mission provider of a rescue mission by the guarantor in accordance with the launch insurance policy.

However, Wallstreet discloses that paying a rescue mission provider of a rescue mission by the guarantor in accordance with the launch insurance policy was a common payment arrangement in the repair or retrieval of satellites under satellite insurance contracts. (par. 3). At the time of the Applicant's invention, it would have been obvious to one of ordinary skill in the art to have an insurer/guarantor pay a third party (e.g. rescue provider) to rescue the satellite, as disclosed by the teachings of Wallstreet. One would have been motivated to include this feature to maximize the costs recovered by the insurer, while minimizing company resources expended. (Wallstreet: par. 2,4)

(B) As per claim 11, Otis discloses obtaining an insurance policy that provides coverage that encompasses the operation of placing the satellite into the cargo hold of the space shuttle, refitting it with a new perigee motor, and the reboost of it into its final

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operational orbit, wherein any failures during this phase of coverage are covered by the insurance policy (i.e., failing to reboost it into its final operational orbit) (par. 7-8, 11).

(C) As per claim 12, Otis discloses a method of insuring through coverage for the in-space recovery and “reboost” of a satellite (par. 2) comprising:

- purchasing a satellite for orbiting the earth/ acquiring a satellite for orbiting the earth by INTELSTAT (see discussion of INTELSTAT VI (F-3) for providing worldwide telecommunications services) (par. 3-4) (It is respectfully submitted that Hughes Aircraft built the INTELSTAT VI which INTELSTAT then acquired which is considered to be a form of purchasing);
- obtaining a risk management package encompassing two separate but overlapping coverages in one policy, wherein the first portion of the coverage insures the satellite in low orbit and until its recovery by the NASA space shuttle, and wherein the second phase of coverage encompasses the operation of placing the satellite into the cargo hold of the space shuttle, refitting it with a new perigee motor, and the reboost of it into its final operational orbit (par. 7-8) (It is respectfully submitted that this provision of the Otis article would cover the launch of the satellite into an unintended orbit (i.e., if the rescue mission of the INTELSTAT VI fails because the satellite is re-launched into an unintended orbit, then the policy would cover this failure since any failure is part of the package (par. 12)); and

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- launching the satellite into an unintended orbit but the satellite otherwise remains functional so as to trigger the rescue mission provision; (par. 2-8—See 112, 2nd paragraph rejection); and
- initiating a rescue/ recovery mission and moving the satellite from an unintended operational (lower) orbit to a final operational orbit (par. 2-8).
- obtaining an insurance policy that provides coverage that encompasses the operation of placing the satellite into the cargo hold of the space shuttle, refitting it with a new perigee motor, and the reboost of it into its final operational orbit, wherein any failures during this phase of coverage are covered by the insurance policy (i.e., failing to reboost it into its final operational orbit) (par. 7-8, 11) (reads on “rescue mission failure insurance policy”);
- performing a a rescue mission in an attempt to reboost the satellite into its final operation orbit resulting in an unsuccessful attempt to rescue the satellite (par. 3-8, 11, 23); and
- providing financial compensation for the loss of the satellite by the insurer/guarantor to INTELSTAT if the rescue mission fails (par. 3-8, 11, 23).

Otis fails to expressly disclose: obtaining a launch insurance policy prior to launching the satellite from Earth.

Shapiro discloses obtaining satellite launch insurance coverage, which covers the satellite from its initial Earth launch through some term into its orbit. (Shapiro: par. 15-16, 30, i.e. wherein the launch insurance policy including a provision from a

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guarantor covering the launch of the satellite into an unintended orbit.) At the time of the Applicant's invention, it would have been obvious to one of ordinary skill in the art to modify the method of Otis with teachings of Shapiro to include satellite launch insurance to cover a satellite insurance prior to initial launch from Earth. As suggested by Shapiro, one would have been motivated to include this feature to reduce the risk from loss of revenue and customer confidence resulting from any aspect of satellite failure/malfunction. (par. 33)

Otis discloses a method a brokerage group, Corron and Black Inspace, provides a risk management package encompassing two separate but overlapping coverages, (par. 5-7), in exchange for a premium (par. 15-16). In the policy, the first portion of the coverage insures the satellite in low orbit and until its recovery by the NASA space shuttle, and wherein the second phase of coverage encompasses the operation of placing the satellite into the cargo hold of the space shuttle, refitting it with a new perigee motor, and the reboost of it into its final operational orbit (par. 5-7). (Hughes payse

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However, Wallstreet discloses that paying a rescue mission provider of a rescue mission by the guarantor in accordance with the launch insurance policy was a common payment arrangement in the repair or retrieval of satellites under satellite insurance contracts. (par. 3). At the time of the Applicant's invention, it would have been obvious to one of ordinary skill in the art to have an insurer/guarantor pay a third party

(e.g. rescue provider) to rescue the satellite, as disclosed by the teachings of Wallstreet. One would have been motivated to include this feature to maximize the costs recovered by the insurer, while minimizing company resources expended. (Wallstreet: par. 2,4)

8. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Otis, Shapiro and Wallstreet as applied to claim 8, and further in view of Scott (5,806,802).

(A) As per claim 9, Otis discloses insurance coverage for the operation of placing the satellite into the cargo hold of the space shuttle, refitting it with a new perigee motor, and the reboost of it into its final operational orbit (par. 7-8)

Otis fails to expressly disclose the provision for the guarantor initiating a recovery mission including “providing for moving an unmanned extension spacecraft within proximity of the orbiting satellite, mechanically connecting the extension spacecraft to the orbiting satellite to form a docked satellite-spacecraft combination, and moving the satellite-spacecraft combination using the control systems of the extension spacecraft”.

Scott discloses providing for launching a SIRE spacecraft, which is unmanned, from earth within proximity of the orbiting satellite, docking the SIRE spacecraft with the target satellite to create a docked combination, and moving the combination using control system of the SIRE spacecraft (Fig. 1-4b, col. 1 lines 22-33, col. 6 line 63 to col. 8 line 33).

At the time the invention was made, it would have been obvious to include the aforementioned features of Scott within the method taught by Otis with the motivation of

extending the life of orbiting satellite and reducing the risk and expense of operations for repairing satellites (Scott; col. 1 lines 47-63).

(B) As per claim 10, Otis fails to expressly disclose moving an unmanned extension spacecraft within proximity of the orbiting satellite, mechanically connecting the extension spacecraft to the orbiting satellite to form a docked satellite-spacecraft combination, and moving the satellite-spacecraft combination using the control systems of the extension spacecraft.

Scott discloses providing for launching a SIRE spacecraft, which is unmanned, from earth within proximity of the orbiting satellite, docking the SIRE spacecraft with the target satellite to create a docked combination, and moving the combination using control system of the SIRE spacecraft (Fig. 1-5 and 8, col. 1 lines 22-33, col. 6 line 63 to col. 8 line 33).

At the time the invention was made, it would have been obvious to include the aforementioned features of Scott within the method taught collectively by Otis with the motivation of extending the life of orbiting satellite and reducing the risk and expense of operations for repairing satellites (Scott; col. 1 lines 47-63).

Response to Arguments

9. Applicant's arguments with respect to claims 8-12 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RACHEL L. PORTER whose telephone number is (571)272-6775. The examiner can normally be reached on M-F, 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, (Christopher) Luke Gilligan can be reached on (571) 272-6770. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. L. P./
Examiner, Art Unit 3626

/C Luke Gilligan/
Supervisory Patent Examiner, Art Unit 3626